



PERMIT No. ALS000032

Industrial Storm Water Runoff

Permit Part II B.10.



INDUSTRIAL STORM WATER RUNOFF

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The City's National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) requires that the City implement a program to inspect, monitor and control pollutants in storm water runoff to the MS4 from municipal waste landfills, hazardous waste treatment, storage, disposal and recovery facilities, and industrial facilities and high risk commercial facilities. Facilities to be addressed under this program include facilities that have reported under the requirements of the Emergency Planning and Community Right to Know Act (EPCRA) Title III, Section 313 and any other industrial or commercial discharge that the City determines is contributing substantial pollutants loading to the MS4 ("high risk facilities").

Facility Inventory:

- ❖ Tier II - 237
- ❖ Municipal Waste Landfills - 2

INDUSTRIAL STORM WATER RUNOFF PROGRAM SUMMARY

The City of Birmingham is required to develop and implement an Industrial and High Risk Runoff Program. The main goal of this program is to identify and control pollutants in stormwater discharges to the City MS4 from municipal landfills; other treatment, storage or disposal facilities for municipal wastes (e.g. transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal, and recovery facilities and facilities that are subject to EPCRA Title III, Section 313; and any other industrial or commercial discharge the City determines is contributing a substantial pollutant loading to the City MS4. Under this program, the City will:

- ❖ Identify and locate all municipal waste landfills, hazardous waste treatment, storage, disposal and recovery facilities, industrial and high risk commercial facilities, and industrial facilities, both NPDES permitted facilities and non-NPDES permitted facilities within the MS4
- ❖ Perform annual inspections of municipal waste landfills, hazardous waste treatment, storage, disposal (TSD) and recovery facilities
- ❖ Perform annual inspections, at a minimum, of industrial facilities and high-risk commercial facilities that do not have an NPDES permit

PROGRAM OVERVIEW:

The City is currently inspecting selected industrial sites for stormwater pollution. These have been isolated to illicit discharge inspection efforts by the inspection team. The City's Industrial



and High Risk Runoff Program, per the requirements of the NPDES Permit, will identify all other industries and high risk runoff facilities within the City political boundaries not already subject to State NPDES regulations and in keeping with appropriate Standard Industrial Classification (SIC) or the North American Industry Classification System (NAICS) codes. Operators of industrial facilities or sites with activities included in one of eleven (11) SIC categories are generally required to obtain NPDES Industrial Stormwater Permits, unless conditionally excluded. Below are the eleven industrial activities subject to NPDES requirements:

SIC Category	Industrial Activity
I	Facilities with effluent limitations
II	Manufacturing
III	Mineral, Metal, Oil and Gas
IV	Hazardous Waste, Treatment, or Disposal
V	Landfills
VI	Recycling Facilities
VII	Steam Electric Plants
VIII	Transportation Facilities
IX	Treatment Works
X	Construction Activity
XI	Light Industrial Activity

Additionally, the EPAs multi-sector Permit identifies thirty-three (33) industries with a high potential to contaminate surface runoff from their property. The list provided below includes some of the industries required to obtain a NPDES Industrial Stormwater Permit.

NAICS Code	Industry		NAICS Code	Industry
2122	Metal Mining		331x	Primary Metals
2121	Coal Mining		332x	Fabricated Metals
2111	Oil & Gas Extraction		333x	Industrial Machinery
2123	Nonmetallic Minerals		334x	Electronic Equipment
311x	Food Products		336x	Transportation Equip.
3122	Tobacco Products		3359	Instrument Products
313x	Textile Mill Products		339x	Misc. Manufacturing
315x	Apparel & Textiles		482x	Railroad Transportation
321x	Lumber & Wood		485x	Passenger Transit
337x	Furniture & Fixtures		484x	Trucking/Warehousing
322x	Paper Products		491x	USPS
323x	Printing & Publishing		483x	Water Transportation
325x	Chemical Products		481x	Air Transportation
324x	Petroleum & Coal		441x	Motor Vehicle Parts
326x	Rubber & Plastics		423x	Scrap & Wastes
316x	Leather Products		4247	Petroleum Bulk Stations
327x	Stone, Clay & Glass			

The City of Birmingham evaluates a facility or site for designation as an industrial and high risk facility based on:

- ✓ Whether or not the facility is inspected by FIRE for RCRA compliance
- ✓ Illicit discharge monitoring program
- ✓ MS4 NPDES permit requirement
- ✓ Wet and dry weather receiving water monitoring program
- ✓ SIC/NAICS Code
- ✓ Material handling and storage practices
- ✓ Regulatory databases
- ✓ Fenceline visits
- ✓ Public complaints
- ✓ Other (Such as history of NPDES non-compliance, etc.)

Inspections done in conjunction with the Birmingham FIRE Department by Stormwater Management staff are conducted routinely, when an illicit discharge is identified and suspected to be originating from the facility, when a spill is occurred and material from the spill has the potential to enter into the City's MS4, and when citizen complaints are received about possible stormwater pollution sources at a facility. As part of the inspection, the inspectors will,

- ✓ Inspect the facility for illicit connections to the MS4
- ✓ Inspect storm water drainage areas for evidence of pollutants entering the drainage system or associated staining of the ground surrounding an inlet
- ✓ Evaluate the effectiveness of measures to reduce pollutant loadings and whether additional measures are needed
- ✓ Inspect the facilities for possible contact of the material stored with storm water
- ✓ Observe structural measures, sediment controls, and other storm water best management practices (BMPs) to ensure proper operation
- ✓ Review the facility Storm Water Management Plan, Storm Water Pollution Prevention Plan, or Spill Prevention, Control and Countermeasures Plan and verify adequate implementation
- ✓ Inspect any equipment needed to implement storm water management at the facility, such as spill response equipment
- ✓ Evaluate the adequacy of storm water management documents and record, such as storm water pollution prevention plans, in-house inspection logs/checklists, training, etc.

The City of Birmingham Stormwater Protection Ordinance (No. 14-198) provides authority to implement the industrial and high risk runoff inspections required by the Phase I NPDES MS4 Stormwater Permit. Based on any inspection findings, the inspection team decides if a follow-up inspection is required. If the inspection is deemed satisfactory, where the facility is maintaining all the requirements necessary for controlling non-stormwater discharges from polluting the City's MS4 system with stormwater with industrial materials, no further action is required. If however the inspection is deemed unsatisfactory, when the inspection team determines that the facility's stormwater discharge may reasonably be expected to contribute a significant pollutant load to the City's MS4, the facility will be given a written exception notification. The exception notification identifies the applicable requirements of the City Stormwater Ordinance and requires the industrial or high risk facility to take all reasonable steps to minimize or prevent the discharge of pollutants to the City's MS4. The exception notification will contain a schedule for the facility to respond and contains an acknowledgement block for the owner/operator to specify their intent to comply and provide proposed BMPS to prevent or minimize pollutants present in the storm water being discharged.

MUNICIPAL WASTE LANDFILLS:

The Birmingham Fire Department with the help of Stormwater staff is currently inspecting two landfill facilities in its jurisdiction (New Georgia Landfill & Eastern Area Landfill). In addition, the City reviews the facility's NPDES Permit DMR results reported to ADEM.

MATERIAL HANDLING AND STORAGE PRACTICES:

Industrial or commercial areas with industrial materials and activities, that have outdoor processing, handling, or storage of raw solid materials or finished products at the facility that may have potential for stormwater contamination will be identified and listed under Industrial and High Risk Runoff Database. Industrial materials and activities include, but are not limited to, material handling equipment or activities; industrial machinery; raw materials, intermediate products, by-products, and final products; or waste products. Material handling activities include storage, loading and unloading transportation or conveyance, of any raw material, intermediate product, by-product, final product or waste product. (See Tier II Facilities list provided in Exhibit A.)

TRAINING PROGRAM ELEMENT:

The Fire Department will conduct training and workshops to designated inspection personnel to perform stormwater industrial and high risk facility inspection on an on-going basis to ensure effective and consistent inspections throughout the City. Additional training on new regulations from City, County, State and Federal Agencies are conducted as needed.



CONCLUSIONS

Section Contributors:

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Future Direction:

The City will assess its Industrial and High Risk Runoff Program on an annual basis to determine if it has been effective and efficient. Based on the finding of the program assessment, the City will modify its program for the following permit year to have a more efficient program to control and eliminate the non-stormwater discharges to the City MS4.

Exhibit A

Maps



Exhibit B

Forms

Exhibit C

Tier II Facility Report

